

### **REMARKS/ARGUMENTS**

Examination and allowance of pending Claims 1-13 are respectfully requested. Claim 1 has been amended. Claims 3 and 4 have been cancelled and Claims 14-22 are withdrawn. No new claims have been added.

**Claims 1-3, 5, 8 and 13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Lange et al. (4,493,166).**

Lange neither describes nor suggests ... an air bearing support member configured to pivot about an axis of rotation with substantially zero frictional resistance opposing said pivotal movement ... a grinding unit coupled to the air bearing support member, the grinding unit being configured to directly apply a predetermined force normal to the at least one edge to remove a predetermined amount of material from the at least one edge while tracking the at least one edge, the predetermined force being directly proportional to the predetermined amount and less than a normal force resulting in glass substrate breakage ... a support platform coupled to the air bearing support member, the support platform being configured to pivot about the axis of rotation with the air bearing support member ... and a grinding device coupled to a portion of the support platform offset from the axis of rotation, the grinding device being configured to grind or polish the at least one edge; and wherein the support platform includes a counter weight, the counterweight and the grinding device being symmetric about the axis of rotation...as recited in Applicants' newly amended base Claim 1.

The Examiner indicated that Claim 4 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Applicants have rewritten base Claim 1 to include the limitations of Claim 4 and intervening Claim 3.

Accordingly, Applicants' base Claim 1 and dependent Claims 2, 5, 8 and 13, which directly or indirectly depend from Claim 1, are patentably distinct over the Lange reference under 35 U.S.C. § 102(b) and thus the rejection should be removed.

**Claims 6, 7, 9 and 10 are rejected under U.S.C. § 103(a) as being unpatentable over Lange et al.**

Lange neither describes nor suggests ... wherein the grinding wheel is a 450 grit grinding wheel... as recited in Applicants' Claim 6, nor ... wherein the grinding wheel is a 600 grit grinding wheel... as recited in Applicants' Claim 7, nor ... wherein the predetermined force is substantially within the range of 1N – 6N, and the predetermined amount is substantially within the range of 25 microns – 150 microns ... as recited in Applicants' Claim 9, nor... wherein the predetermined force is substantially equal to 4N and the predetermined amount of material removed from the edge is substantially equal to 100 microns as recited in Applicants' Claim 10.

Accordingly, and for reasons discussed above in conjunction with Applicants' base Claim 1, dependent Claims 6, 7, 9, and 10 which directly or indirectly depend from base Claim 1, are patentably distinct over the Lange reference under 35 U.S.C. § 103(a) and thus the rejection should be removed.

**Dependent Claims 11, 12 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over prior art as applied to claims 1 and 14 above, and further in view of Clark et al. (6,428,390).**

As discussed above, prior art as applied to claim 1 does not meet the

limitations of the above claims, and further do not disclose or suggest, whether taken together or separately ... a conveyor system disposed proximate the grinding unit, the conveyor unit being configured to support the glass substrate, and move the glass substrate in a tangential direction relative to the grinding unit during grinding and/or polishing process steps ... as recited in Applicants' Claim 11, ... a vacuum chuck for holding the glass substrate in a fixed position during the grinding and/or polishing process steps; a conveyor coupled to the vacuum chuck, the conveyor being configured to move the vacuum chuck in a linear direction relative to the grinding unit at a predetermined rate; and a coolant mechanism disposed proximate an interface of the grinding unit and the at least one edge ... as recited in Applicants' Claim 12.

For reasons of record and for the above discussion with regard to Claim 1, dependent Claims 11 and 12 which depend from Applicants' base Claims 1, are patentably distinct over prior art (Sakurai or Stock in view of Lougher or Duescher and Clark) references under 35 U.S.C. § 103(a) and thus this rejection should also be removed.

### **CONCLUSION**

Based upon the above amendments, remarks, and papers of records, applicant believes the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests that a timely **Notice of Allowance** be issued in this case on Claims 1-13.

Applicant believes that no extension of time is necessary to make this Reply timely. Should applicant be in error, applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

Please direct any questions or comments to Joanne N. Pappas at 978-635-2289.

Respectfully submitted,



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